

HT03-010

### ABSTRACT

Reader asymmetry control has become an important issue as track widths continue to shrink. This has been achieved by providing adaptive adjustment to the asymmetry of individual heads by means of an additional permanent hard magnet, which may be internal or external to the head. This special 'tuning' magnet biases the shields and the sensor to achieve suitable asymmetry and/or amplification. Head bias adjustments may be done individually or in batch. Both the internal and the external magnet versions are described.